in two large folio volumes in 1888, and will ever be a monument of his industry and learning. It deals at length with the anatomy of the shoulder-girdle of birds; while in the second volume a scheme of classification was proposed, based on all the facts of the internal and external characters of birds. Unfortunately but little attention was paid to this great work by British ornithologists, though it was noticed in 'The Ibis' (1888, p. 413); and an excellent abstract from the pen of Dr. Gadow, Fürbringer's only serious rival in this subject, appeared in 'Nature' (vol. xxxix. 1888, pp. 150-152, 177-181). Dr. Fürbringer also published a later summary of our knowledge of the Anatomy of Birds in the Report of the Second International Ornithological Congress, held at Budapest in 1891, and a further disquisition on the same subject in the 'Jenaische Zeitschrift f. Naturwissenschaft' (xxxvi. pp. 587-736) in 1902, which was also noticed in 'The Ibis' (1903, p. 614).

No serious student of ornithology can neglect the study of these great works, and the death of their author should recall to us their importance and value.

XXXIX.—Notices of recent Ornithological Publications.

Arrigoni degli Oddi's list of papers.

[Elenco delle pubblicazioni del Prof. E. Arrigoni degli Oddi (1884–1920). Pp. 1-10. Venezia, 1921. 8vo.]

Count Arrigoni degli Oddi, who is not only one of the leading Italian ornithologists and Professor of Zoology at Padua, but also a Deputy in the Italian Parliament and a member of the B.O.U. since 1896, has favoured us with a number of his publications, most of which have already been noticed in our pages. The list of his papers, mentioned above, contains 162 titles published between 1884 and 1920, and is a proof of his activity in ornithological work.

Bretscher on Bird-migration in Middle Europe.

[Der Vogelzug in Mitteleuropa. Mit 16 Karten und vielen Tabellen. Von K. Bretscher. Pp. 1–162. Innsbruck (Wagnerschen Univ. Buchdruck.) 1920. 8vo.]

In this separately-published memoir Mr. Bretscher endeavours to trace out the migration routes in Switzerland and the neighbouring countries by an elaborate analysis of all the available data. The first two chapters, comprising more than half the work, deal with the spring and autumn migration in Switzerland. These are followed by an analysis of the spring migration in Alsace-Lorraine, Brunswick, and Hungary, and in the final chapter the influence of temperature is discussed.

The general method employed in the case of Switzerland is to divide the country into seven geographical areas, and by plotting down the date of observation, according to the areas and the date of the "Zugsmittel" or culmination of the migration-time, to discover by what route the various species enter the country. In the case of the spring migration the general conclusion appears to be that most of the migrating birds enter Switzerland at the south-west corner of the Lake of Geneva or in the north-west over the Jura, and that, with the exception perhaps of the Swallow, no birds cross the high ranges of the Alps from the south.

The paper is a long one and full of details and conclusions which it is impossible to summarize in a short notice, and our only fear is that the data used are hardly sufficient to warrant some of the conclusions arrived at.

Chapin on new African Birds.

[Descriptions of four new birds from the Belgian Congo. By James T. Chapin. Amer. Museum Novitates, no. 7, 1921, pp. 1-9; 3 figs.]

This is the fifth preliminary paper on the results of the author's expedition to the Belgian Congo on behalf of the American Museum of Natural History, and contains descriptions of the following new forms from the Ituri and Upper Uele districts:—Astur toussenellii canescens, Colius

nigricollis leucophthalmus distinguished by its white iris, Batis ituriensis, and Terpsiphone batesi.

# Foster on the Birds of Hillsborough.

[The Birds of Hillsborough. By Nevin H. Foster, M.B.O.U. Proc. Belfast Nat. Hist. & Philos. Soc. 1920–1921, pp. 1–19 (separate pagination).]

Hillsborough is a small town in the north of County Down; it is a short distance from Belfast, and is the centre of a somewhat highly cultivated district. Mr. Nevin Foster has in this paper compiled a list of the birds of the neighbourhood, chiefly from his own notes, dating back to 1902. The list embraces 109 species, out of which 76 have been known to breed in the district.

Several rare species such as the Golden Oriole and the Alpine Swift, the records of which are not entirely satisfactory, are included in the list, but placed in square brackets.

## Gurney's Ornithological Report for Norfolk.

[Ornithological Notes from Norfolk for 1920. 27th Annual Report. By J. H. Gurney, F.Z.S. Brit. Bds., London, xiv. 1921, pp. 242-252.]

Mr. Gurney's annual report on Norfolk ornithology contains the usual summary on migration and a series of classified notes. There were no events of unusual importance during the year, but the Curlew is believed to have bred again near King's Lynn and the Sandwich Tern at Blakeney. The Spoonbills came to Breydon in May and stayed about three weeks, though they did not breed, but the Bitterns are now becoming comparatively common, and many nests are located every year.

# Hartert on the Birds of the Southern Sahara.

[The birds collected by Capt. Angus Buchanan during his journey from Kano to Aïr or Asben. By Dr. Ernst Hartert. Nov. Zool. Tring, xxviii. 1921, pp. 78-141; 9 pls.]

Asben or Aïr is a mountainous district in the southern part of the Sahara, about 350 miles north of Kano the great trade centre in the northern part of Northern Nigeria;

the highest mountain, Mt. Baguezan, reaches an elevation of 6050 feet, and no naturalist has ever previously collected in this district, though it has been occupied by the French now for some years. The results of this expedition are therefore of very special interest, not only because the fauna of Asben was quite unknown, but also because it has brought fresh light on the boundary-line between the Palæarctic and Ethiopian regions. Capt. Angus Buchanan. whom Lord Rothschild was fortunate enough to secure to undertake this mission, was most successful, and brought examples of 168 species of birds, of which, however, only 65 were from Asben itself. Of these 65 by far the greater proportion are inhabitants of tropical Africa and had reached Asben from the south, but a few, about 8 or 10 species, must have reached Asben from the north. We may therefore conclude that Asben lies within the Ethiopian Region, while the fauna of Hoggar mountains, about 300 miles to the north, where in 1914 Geyr von Schweppenburg and Spatz made their fruitful collections, is predominantly palæarctic in character.

Capt. Buchanan reached Kano, from Lagos, early in December 1919 and stayed there a month. From there he proceeded to Agades, the capital of the district, which he reached on 11 April, 1920. He was in the mountains from May 8 to June 6 and got back to Kano in September. The rainy season was then at its height. He also made collections of Mammals, Insects, and other animals, and of plants.

Dr. Hartert has discussed the birds at considerable length, drawing attention to their status, distribution, variation, and moults, and has described twelve new subspecific forms. As the Novitates is so accessible to all workers it does not seem necessary to list these here. The nine plates contain views of the scenery of the country from the photographs of Capt. Buchanan.

We can only conclude by congratulating Capt. Buchanan, Lord Rothschild, and Dr. Hartert on having accomplished a fine piece of work and having made a very considerable addition to our knowledge of African birds.

Hellmayr on d'Orbigny's South-American Collections.

[Review of the Birds collected by Alcide d'Orbigny in South America. By C. E. Hellmayr, Part I. Nov. Zool. Tring, xxviii, 1921, pp. 171-213.]

Alcide d'Orbigny (1802-1857) was a well-known French traveller and naturalist in the early part of the last century. During the years 1826-1833 he travelled and collected extensively on behalf of the French government in the south-western part of South America, and transmitted to the Paris Museum large numbers of objects of natural history. The account of the journeys and collections was published in a series of large quarto volumes between 1835 and 1847, but unfortunately was never completed. He also, with the co-operation of his countryman, M. H. de Lafresnaye, published a preliminary list of the species of birds obtained in the 'Magasin de Zoologie,' but this, too, remained incomplete. While most of the birds collected by d'Orbigny are to be found in the Paris Museum, some remained in the possession of Lafresnave and have now found their way to the Muscum of Comparative Zoology in Cambridge, Mass.

Dr. Hellmayr has now undertaken the difficult task of revising and commenting on d'Orbigny's work, for which purpose he made a number of visits to the Paris Museum before the war, and in the present paper he gives us the first part of the results of his long labours. The present instalment deals with the Birds of Prey and a small moiety of the Passeres. The original d'Orbigny specimens, many of them mounted, are listed and re-identified and compared with other examples at Tring and elsewhere. The paper is a most important one for all workers on Neotropical ornithology.

Lavauden on the Mediterranean Peregrines.

[Contribution à l'étude des formes méditerranéennes du Fauçon Pèlerin. Par L. Lavauden. Extr. from Rev. Franç. d'Orn. nos. 145, 146, 1920.]

M. Lavauden has given us here a careful critical study of the various forms of Peregrine found round the Mediterranean. He has made a thorough examination of the literature and compared a large number of examples in the Paris Museum, his own collection, and elsewhere.

He comes to very much the same conclusions as Dr. Hartert, except that he believes that Falco punicus of Levaillant, jun., is identical with Falco brookei of Sharpe, and not with F. peregrinoides Temm. If this is so the Sardinian Peregrine will have to be called Falco punicus in future.

M. Lavauden has plotted the measurements of the three Mediterranean Peregrines, of which he has examined and measured 287 adult examples, so as to form an ingenious curve which illustrates very plainly the variation in the wing-measurements of the three forms.

#### Mathews on Australian Birds.

[The Birds of Australia. By Gregory M. Mathews. Vol. ix. pt. 3; pp. 97-144, pls. 412-418. London (Witherby), June 20th, 1921.]

A very important discovery is recorded in this part by the author-namely, that the types of Gould's species are not all at Philadelphia. Many are in the British Museum, and Mr. Mathews devotes several pages [105-107] to the subject, which will be fully discussed later. The present part is concerned with seven species of Campophagidæ, of which the Ground Cuckoo-Shrike, with its terrestrial habits, is the most remarkable. Mr. Mathews's argument proves the generic term Pteropodocys to have priority over Ceblepyris, and he allows three subspecies. Similarly, Grancalus takes precedence of Coracina, while the Black-faced Cuckoo-Shrike should be specifically named novehollandie and not melanops [p. 113]. This species was painted by Ellis, and has been confounded with Latham's robustus, which is the lesser species. Six subspecies are accepted, for one of which the name melanops is used. The type appears to have come from Tasmania, so that parvirostris is a synonym.

G. hypoleucus has four Australian subspecies, but it is evident that there are others that are extralimital. The habits of this northern form and of the Little Cuckoo-Shrike need further attention; those of the other species have been

well studied. The last-named bird varies, so that we may admit three subspecies; it is in the Watling paintings, and the name robustus supersedes mentalis, that name being used subspecifically. G. affinis is possibly a synonym [p. 131]. Paragraucalus lineatus is correct, as Gould could not, under the present rules, have changed the name to swainsonii. Two subspecies are recognized. The case is almost the same with Metagraucalus tenuirostris, which Rüppell renamed jardinii, but here there are three subspecies. Lalage is begun in this part, and on the first page Monarcha is concluded, a special point being that canescens of Salvadori is reduced to a subspecies of melanopsis. M. kursudi is altogether dropped.

### Riley on new Celebes Birds.

[Five new genera of birds. Four new birds from Celebes. By J. H. Riley. Proc. Biol. Soc. Washington, vol. 34, 1921, pp. 51-58.]

The five new genera are Compsanas for Zonophaps radiata (Q. & G.), Lamprura for Zonophaps rufigaster (Q. & G.), Diopezus for Phleganas tristigmata Bp., Cranobrontes for Cranorrhinus leucocephalus (Vieill.), and Orodytes for Arachnothera or Stigmatops celebensis Meyer & Wigles., the last a bird of rather uncertain affinities. The four new forms comprise Scolopax celebensis, Lamprocorax montrosa, and new forms of Dendrobiastes and Myzomela—all from Celebes, collected by Mr. H. C. Raven.

### Rothschild on the Birds of Yunnan.

[On a collection of Birds from West-Central and North-Western Yunnan. By Lord Rothschild, F.R.S., Ph.D. Nov. Zool, Tring, xxviii. 1921, pp. 14-67.]

In this paper Lord Rothschild enumerates and describes a collection of 279 species and subspecies of birds collected by Mr. George Forrest in the mountains of Yunnau. Mr. Forrest is a well-known botanical collector, and the birds were a parergon to his main task. Colonel Stephenson Clarke, for whom the collection was made, has most generously presented half the bird-skins, including the types of the new forms, to the British Museum, and the other

half to the Tring Museum. Twenty new species and subspecies are described, but some of these are from other parts of the Indian Region and do not form part of the Forrest collection.

The number of forms now known from Yunnan amounts to 496, out of which 59 are added in the present paper. The character of the avifauna is distinctly Himalayan, but many migrants from the north pass the winter in Yunnan.

#### Schi øler on Danish Birds.

[Sushkin's Gaas, Anser neglectus Sush., truffen i Denmark. Bartram's Klire, Bartramia longicauda (Bechst.), ny for Denmark. By E. Lehn Schiøler. Dansk. Orn. For. Tids. xv. 1921, pp. 37-47.]

An example of the rare Goose Anser neglectus killed at Ballum, on the west coast of Schleswig, has recently been acquired by Mr. Schiøler, who has a wonderful collection of Palæarctic Water-birds. It is the first record for Denmark. Mr. Schiøler in this paper discusses its status and affinities but comes to no very definite conclusions, and until its breeding-place, said to be Nova Zembla, is accurately known it will be difficult to do so.

The Upland Plover (Bartramia longicauda) is a well-known North-American bird, and has occasionally reached the British Islands and the continent of Europe. An immature female example was found by Mr. Schiøler among some Snipe in the Copenhagen market. These had been killed at Tim in western Jutland. It is the first record of the occurrence of the Upland Plover in Denmark.

# Shufeldt on pictures of the Passenger Pigeon.

[Published figures and plates of the extinct Passenger Pigeon. By Dr. R. W. Shufeldt. Scientific Monthly, 1921, pp. 457-480; 15 figs.]

This paper, which was read at the last meeting of the American Ornithologists' Union in November 1920, contains an account of all the more important published figures of the Passenger Pigeon, from that given by Catesby in his 'Natural History of Carolina, Florida, and

the Bahama Islands,' published in 1771, down to photographs of the last survivor of the species which lived in the Zoological Gardens at Cincinnati, and which is now mounted in the United States Museum, at Washington. Dr. Shufeldt gives the palm to a plate reproduced from a painting by Mr. Fnertes which appeared in Eaton's 'Birds of New York,' published in 1910.

The photographs of the plates were taken by Dr. Shufeldt himself, and form a most interesting series of reproductions.

### Stresemann on Sumatran Woodpeckers.

[Die Spechte der Insel Sumatra—Eine monographische Studie. Von Dr. E. Stresemann. Arch. Naturg. vol. 87, Abt. A. pp. 64-120, 1921.]

It is in the Malay Peninsula and Sumatra that we find the greatest development of the Woodpeckers, the former containing 24, the latter 22 different forms, and Dr. Stresemann has accomplished a most useful task in preparing the present monograph based on the material available in Germany, Holland, and at Tring. The nomenclature is carefully worked out, and should be taken note of by all workers on the birds of the Indian Region. Dinopium of Rafinesque takes the place of the more familiar Tiga of Kaup, and Blythipicus for Lepocestes of the Catalogue. New forms are:—Picus vittatus limitans from Kangean 1., near Bali, Callophus miniatus dayak from Borneo, Dinopium javanense palmarum from Sumatra. There is a carefully constructed kev of all the forms treated of, and some interesting general remarks on geographical distribution, variation in size and colour, and sexual dimorphism and moult.

### Wollaston's Life of Newton.

[Life of Alfred Newton, Professor of Comparative Anatomy, Cambridge University, 1866-1907. By A. F. R. Wollaston. Pp. xvi + 332; portraits. London (John Murray), 1921. 8vo.]

Newton apparently passed on one of his characteristics to his biographer, for this long looked-for volume has appeared just fourteen years after his death, but there the resemblance ends, for whereas Newton's works improved by delay the same cannot be said of this book, which the author tells us has had to be cut down by nearly half owing to the present price of printing.

The main object of a "Life" should be to give a clear and impartial account of the chief characteristics of the "Subject," and those of us, who knew Newton, get a good and truthful picture; but a "Life" has also another function, namely, by showing the intimate methods by which a man earned his reputation, others might be spurred on to go and do likewise; on this point, in our opinion, the volume fails, for it lacks continuity in its arrangement and does not lead the reader easily from chapter to chapter, so that we fear that the present generation of ornithologists will rather keep it as an ornament to their bookshelves than assimilate the large amount of valuable information contained in it, and understand the methods which made Newton the foremost and soundest ornithologist of his day.

Mr. Wollaston has the capacity for writing delightful books, but this is not one of them. To read through and epitomize Newton's vast correspondence can have been no easy task, but the result would have made more pleasant reading had the compiler compiled less and written more. The best and most concise description of Newton is found in the chapter by Sir A. E. Shipley, where we have a truly delightful and accurate description of the Professor, but the first half of that chapter, containing merely a dry description of Cambridge in Newton's early days, might well have been omitted when space was an object, or a map, occupying a page, would have been much clearer and more instructive. Another useful cut might have been the omission of the three pages of telegrams to the "Red Lion's Club." There is no evidence that these were the handiwork of Newton himself, and, even if they were, they occupy a space that might have been better utilized.

Another excellent account of the Professor is given towards the end of the book by Dr. F. H. Guillemard,

who relates his first conversation with Newton on his (Guillemard's) return from Lapland. The fact that he had been there for birds was quite enough for Newton, who promptly asked him round on the following Sunday evening. This episode reminds the writer of his first meeting with Newton, when as a "Fresher" he kept some live birds, ineluding Knots, of which Newton had heard. It was about two o'clock in the afternoon, when my landlady announced "Two gentlemen to see you," and in came Newton with his brother. Nearly his first remark was "And, so you're the Knotty man." He looked at one or two wretched bird-skins I had (I shudder to think what he must have thought of them!) and then, with a cheery "Good afternoon," invited me to his Sunday evenings. Such was the man, and such his attitude towards any undergraduate who showed the least genuine appreciation of Natural History.

We are surprised to find no reference to the volume on Birds of the 'Cambridge Natural History,' and comparatively little on the Great Bustard, but, with a few minor exceptions, most of Newton's 'pet' subjects have been noticed. The main fault of the whole book lies in the way it has been put together. While the reader's thoughts are on one subject, he suddenly finds himself reading a quotation from a letter on another (the quotations not being in inverted commas or otherwise distinguished from the rest of the letterpress), and it may be necessary to turn over several pages to find the author's or recipient's name in a footnote. This arrangement is exasperating to the average man, and makes it anything but a readable book. For the rest, as might be expected from a compilation of Newton's letters, it contains a considerable array of most interesting facts, which make it worth every ornithologist's while to read in spite of the difficulties which are put in his way; and we hope it may find its place on the book-shelves of every 'Ibis' in memory of the keenest and most lovable "gentleman attached to the study of ornithology" that England ever produced.-J. L. B.

Aquila.

[Aquila: Periodical of Ornithology. Edited by Stephan von Chernel. Vols. xxvi. & xxvii. Budapest, 1920 & 1921.]

The articles in 'Aquila' are printed in Magyar and German with oceasionally a summary in French or English. The first one of vol. xxvi. by the editor, Herr von Chernel, is a plea for a renewal of an international scheme for the protection of birds useful in agriculture. It was prepared for the great Peace Conference in Paris at the end of the war, but apparently nothing came of it. Bird-ringing was continued actively during the war years in Hungary, and J. Schenk has a report on the results for the years 1916-1919. Some 2500 birds were ringed, the greater number being Swallows (701), Great Tits (597), and Storks (241). Two of these latter, ringed in the summer of 1911, were recovered in Egypt in 1912 and in South Africa in 1916 respectively, but all the Tits recovered were taken in the same locality in which they were ringed, as were also the Swallows.

Other articles by J. Schenk deal with migration dates in Hungary for 1919 and 1920 respectively. The food-habits of the Magpie are reported on at great length by E. Csiki, but the results are not presented very clearly, so that it is difficult to say whether the bird should be considered useful or harmful in Hungary. The longest article in the 27th volume is one on the Birds of the Siebenbürgen in Transylvania, based on a manuscript written by Nicolaus v. Zeyk, who lived in the early half of the 19th century.

There are a number of shorter notices all relating to Hungarian ornithology in the two volumes here noticed.

#### British Birds.

[British Birds. An illustrated Magazine devoted chiefly to the Birds in the British List. Vol. xiv. June 1920 to May 1921; 12 nos.]

The last completed volume of 'British Birds' fully maintains the high standard set up by its predecessors, and is full of matter of interest to students of Palearctic birds.

Perhaps the most striking contribution is that of Mr. Edgar Chance, who again, for the third year in succession, watched through May and June a female Cuckoo which haunted a small gorse-clad common in Worcestershire. He believes that this one individual laid 21 eggs at intervals of about 48 hours each between May 13 and June 27 in the nests of Meadow-Pipits, of which there were nine pairs inhabiting the common. The Pipits built thirty nests altogether, and this it appears was brought about by destroying the nest after the Cuckoo had deposited her cgg in it, so as to arrange for fresh nests to be ready for the Cuckoo at a subsequent date. Mr. Chance has described his observations, stated his ease, and drawn his conclusions with great clearness. We understand that during the present year he has again been at work, and has taken a series of "moving pictures" which will be shown to the members of the B. O. C. during the coming winter.

Mr. C. B. Ticehurst contributes a series of articles on the history of birds now very rare or extinct in Kent, such as the Kite, Buzzard, Swan, Great Bustard, and Crane; he has obtained a great deal of information from the study of old books and manuscripts. Mr. J. K. Nash writes on the occurrence of the Bee-eater in Midlothian, and how the pair observed were on the point of nesting when the female was captured by a local gardener; and Mr. F. N. Chasen gives an account of the nesting of the Lesser Kestrel in Macedonia.

Among the illustrated articles are a series by Miss E. L. Turner, who has taken her camera to the sand-dunes of Holland and has brought back beautiful examples of her skill, illustrating the Black-tailed Godwit, the Black Tern, the Ruff, and the Avocet; while Mr. T. Lewis contributes notes on the nest of the Little Tern on the coast of Norfolk, illustrated with exquisite photographs of the sitting female being fed by the male.

Mr. Witherby himself discusses the occurrence of the Spotted Eagle and the Steppe Buzzard in the British Isles, and comes to the conclusion that all the records of the

Spotted Eagles which can be identified refer to the larger species, Aquila clanga, and that the occurrence of the Steppe Buzzard (Buteo b. vulpinus) rests solely on the individual killed in 1864 by Mr. J. Clarke Hawkshaw in Wiltshire, and now in the British Museum collection. In the same article he states that the British Tawny Owl is separable from the continental one by its smaller size and by the more frequent occurrence of the tawny phase. It should be known as Strix aluco sylvatica Shaw. Mr. Witherby also contributes two short articles on the progress of the 'British Birds' marking scheme, which is rapidly recovering from the setback caused by the war, and records the fifth example of a Swallow ringed as a young bird in Stirlingshire, 27/vi./19, recovered at Lake Chrissie in the Transvaal, 13/v./20.

#### The Emu.

[The Emu: Official Organ of the Royal Australian Ornithologists' Union. Vol. xx. July 1920 to April 1921.7

As is the case in Europe, so even in far Australia the great increase in the cost of printing has hampered the activities of scientific societies, and the editors and sceretaries of the R. A. O. U. have had a difficult task to keep up the standard of the 'Emu,' though the present volume does not show much diminution in size as compared with previous ones.

The last annual meeting of the Union was held at Perth in October 1920. This is the first time the Union has ever met in Western Australia, and a considerable number of members made the long journey of over 4000 miles from Queensland and other States to attend the session. The January number of the 'Emu' contains a full account of the proceedings, and also a number of papers on the birds of Western Australia, either the result of observations of the visitors, or prepared specially for their edification. Among these there is a workman-like account of the birds of the Swan River district by Mr. W. B. Alexander, and a good article on the birds of Dirk Hartog Island and the Peron Peninsula by Mr. F. L. Whitlock, who was lucky enough to be there during the breeding-season, and thus found the eggs and nests of many of the local forms which Mr. Thomas Carter was unable to obtain.

The Report of the Check-list Committee engaged in drawing up a new Check-list of Australian birds was also considered, and we are glad to observe that the List will probably be quite complete in time for the next annual gathering.

Among the very many communications printed in the present volume, we should like to specially mention one by Mr. R. Stuart-Sutherland, in which he reviews the Penguins, with special reference to the Australian species, and another by Mr. W. B. Alexander, who reviews the Australian species of Tubinares-both useful pieces of work. Mr. A. J. Campbell has prepared some notes on a collection of birds from the islands in the Torres Straits, formed by Mr. W. R. M'Lennan for the H. L. White Collection, which is now at Melbourne in the National Museum. The plumage changes of the Nankeen Night-Heron (Nycticorax caledonicus) have been carefully recorded by Mr. C. F. Cole and are illustrated by a good coloured plate; and Mr. R. Havs has written an account of the food-pellets of Kingfishers, one of the most interesting consisting of the round ealeareous concretions ("crabs' eyes") found in the stomach walls of freshwater Crayfishes, which appear to form a considerable part of the diet of the Laughing Kingfisher (Dacelo gigas).

A new feature of the 'Emu' are the Reports from the State Secretaries, giving accounts of what is going on in each individual State of the great Island Continent, and which undoubtedly must assist in bringing the scattered ornithologists in closer touch with one another.

We notice only two new forms described—Ptilotis gerald-tonensis Ashby, from Geraldton in Western Australia, and Menura superba edwardi Chisholm, from Stanthorpe in southern Queensland near the New South Wales border. This new Lyre-bird differs markedly from the other forms in its habits, as it lives in comparatively open country and the nests are placed in the clefts of giant granite boulders.

It is named after the Prince of Wales, who had just previously passed through the country it inhabits during his recent memorable journey to Australia.

#### El Hornero.

[El Hornero. Revista de la Sociedad Ornitológica del Plata. Vol. ii. for 1920; 2 nos.]

The second volume of 'El Hornero,' completed in two numbers, contains a good deal of information relating to the birds of the Argentine and other neighbouring States and maintains the promise of the first. Sen. J. Tremoleras contributes a list of the birds of Uruguay based on 30 years' observation. The last general list was that of Mr. O. V. Aplin, published in 'The Ibis' for 1894, and we are glad to see Sen. Tremoleras quotes him and gives him all the credit due to him. Mr. A. G. Bennett, of Port Stanley, Falkland Islands, sends good notes and photographs on birds observed by him in the South Shetlands and South Orkneys. This article, though originally written in English, is translated into Spanish for the pages of 'El Hornero.' Some account of the nesting habits and the young birds of the Maguari Stork, also accompanied by photographs, is given by Sen. M. Fernandez, of La Plata. Those curious external insect parasites which prey on Birds and some Mammals, and which form the group Mallophaga, have been a good deal studied of late years. Sen. F. Lahille has collected and published a list of all those which are found on Argentine birds. They perhaps should not be regarded as parasitic, but rather as epizoic, as they do not appear to injure their host in any way, but feed on the epidermal products, such as the feathers and hairs. Little attention has been paid to the birds of the "chaco" region of north-western Argentina, since Prof. Graham Ker visited it in 1890-1, and we are glad to see in the present volume a long article on the birds of this region by Señor E. L. Arribalzaga, Finally, we must mention Dr. R. Dabbene's own contributions to the volume. He has completed an account of the Argentine Penguins with descriptive keys, ranges and distribution, and outline figures to illustrate the differences of the seven

species inhabiting the Argentine coast. Another study is devoted to the Rheas, of which he recognizes three separable forms. A third paper deals with the North American Wading birds, 24 species of which winter in the southern part of South America; in this case there is a careful list of all the published and many unpublished detailed records. We notice only one new form described. This is Lepasthenura agithaloides pallida Dabbene, from Patagonia.

Both the numbers contain a good many shorter notes, personal paragraphs, and even poems.

### South Australian Ornithologist.

[The South Australian Ornithologist. A Magazine of Ornithology. Vols. iv. & v. for 1919 and 1920; 4 nos. in each year.]

This little magazine, published by the South Australian Ornithological Association and edited by a small committee of its members, continues to reach us regularly, and the last two volumes contain a number of papers almost entirely concerned with observations on South Australian birds. Each number includes an account of the monthly meetings of the Association, and the description with biological details of a single member of the South Australian Avifauna.

Capt. S. A. White has concluded the memoir of his father, Samuel White, one of the pioneers of Australian ornithology and the friend and correspondent of Gould. Mr. A. M. Morgan, Mr. E. Ashby, Mr. J. W. Mellor, Mr. J. N. McGilp, write pleasant articles on their ornithological rambles in various parts of the State. Some controversial letters on nomenclature by Mr. A. J. Campbell and Capt. S. A. White enliven the pages of some of the numbers of the magazine, and in the January 1920 number Mr. Mathews intervened with an essay on "Zoological Nomenclature: its History and Reason," which at once drew a spirited reply from Mr. Campbell.

We notice descriptions of the following new races:— Climacteris erythrops parsoni Mellor, from the Murray river valley; Stipiturus malachurus halmaturina Parsons, from Kangaroo Island. Tori.

[Tori. The Aves. Bulletin of the Ornithological Society of Japan, vol. ii. nos. 9 & 10. April & Dec. 1920.]

With these two numbers is completed the second volume of our Japanese contemporary. We are glad to see that in the last number, not only are the title-page and contents given in English, but the list of officers of the Society and the exact date of publication of the various numbers of the journal. In No. 9 will be found descriptions of a new Flower-pecker from Formosa by Mr. Kuroda, named Dicæum minullum uchidai after the President of the Society. Mr. Kuroda also discusses the sexual distinctions of the lately described Pseudotadorna cristata. Mr. T. Momiyama describes Aplonis kittlitzi kurodai, subsp. n., from Yap in the western Caroline Islands, and Mr. T. Mori writes on the birds of Quelpart Island off Corea. The last number contains a List of the birds of the Dagelet Is., Corea, by Messrs, Kuroda and Mori; Ornithological notes from the neighbourhood of Sasanami, Prov. Nagato, by Y. Kanetsune; On breeding-seasons of some birds in Prefecture Mizagi, by S. Kumagai; and Notes on breeding-habits of Ninox s. scutellata (Raffl.), by Messrs. Kawaguchi and Ikemura. An artistic coloured plate illustrates the subspecies of the Varied Titmouse, Parus varius.

# List of other Ornithological Publications received.

FLETCHER, T. B., & INGLIS, C. M. Some common Indian Birds. Nos. 8 & 9. (Agr. Journ. India, xvi.)

Lincoln, F. C. Instructions for Bird Banding. (U.S. Dept. Agr., Circular 170.)

WITHERBY, H. F. A Practical Handbook of British Birds. (Pt. xi.)

Austral Avian Record. (Vol. iv. no. 6.)

Avicultural Magazine. (Vol. xii. nos. 6-8.)

Bird-Lore. (Vol. xxiii. nos. 3-4.)

Bird Notes. (Vol. iv. nos. 5-7.)

British Birds. (Vol. xv. nos. 1-3.)

Brooklyn Museum Quarterly. (1921, nos. 1-3.)

Canadian Field Naturalist. (Vol. xxxv. nos. 1-3.)

Condor. (Vol. xxxiii. nos. 3-4.)

Fauna och Flora. (1921, no. 3.)
Gerfaut. (XI<sup>c</sup> Année, no. 2.)
Irish Naturalist. (Vol. xxx. nos. 6-8.)
Journal für Ornithologie. (Vol. 69, no. 3.)
Journal of the Bombay Nat. Hist. Soc. (Vol. xxvii. no. 3.)
Journal of the Nat. Hist. Soc. Siam. (Vol. iv. no. 2.)
L'Oiseau. (Vol. ii. nos. 5-7.)
Oologists' Record. (Vol. i. no. 2.)
Ornithologische Monatsberichte. (Vol. 28, nos. 7-8.)
Revue Française d'Ornithologie. (Nos. 146-149.)
Scottish Naturalist. (Nos. 113, 116.)
Tori. (Vol. iii. no. 11.)
Transactions of the London Nat. Hist. Soc. (Vol. for 1920.)

#### XL.—Letters, Extracts, and Notes.

### Bird-migration and the Marking Method.

SIR,—As one of the largest individual ringers of birds in this country, I read Professor Thomson's article on "Birdmigration by the Marking Method' with great interest. In the literature of the subject, however, I was astonished to find no mention of the marking experiments conducted by the late Professor J. A. Palmén, of Helsingfors University, in Finland, or by the Russians at Kielkond, on the island of Oësal, under Herr Stoll. I have found ringed birds in this country marked by both of these gentlemen. Professor Palmén's experiments show some wonderful results, Black-headed Gulls (Larus ridibundus), for instance, showing two distinct lines of migration, the one down the Baltic and the other overland across Europe via Austria to the Mediterranean. His ringing of other species, many of them within the Arctic Circle, also showed long journeys. Large numbers of each species must be marked before any conclusions can be arrived at, yet Professor Thomson also fails to mention my article in 'British Birds,' vol. viii, p. 209, on the result of marking nearly twelve thousand Blackheaded Gulls (Larus ridibundus) in this country. To Professor Thomson's query: "Do young birds seek the same winter quarters as their parents?" the answer is that they